

IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF DELAWARE

POLAROID CORPORATION

Plaintiff,

V.

HEWLETT-PACKARD COMPANY,

Defendant.

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C.A. No. 06-738 (SLR)

**REDACTED –  
PUBLIC VERSION**

**POLAROID’S ANSWERING BRIEF IN OPPOSITION TO HEWLETT-PACKARD  
COMPANY’S MOTION TO PRECLUDE CERTAIN TESTIMONY OF  
POLAROID’S EXPERT DR. PEGGY AGOURIS**

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Original Filing Date: June 12, 2008  
Redacted Filing Date: June 26, 2008

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## **I. NATURE AND STAGE OF THE PROCEEDINGS**

On May 23, 2008, HP filed a Motion To Preclude Certain Testimony Of Polaroid's Expert Dr. Peggy Agouris based upon "an interpretation of source code". This is Polaroid's answering brief in opposition to that motion.

## **II. SUMMARY OF ARGUMENT**

HP's request to exclude particular portions of Dr. Agouris's testimony — based on the unsupported premise that Dr. Agouris is not a source code expert — should be denied. There is no dispute about the content or operation of the source code at issue and HP has no legal or factual support to the contrary. Dr. Agouris is highly qualified in the relevant field of digital image processing and is easily able to recognize and read source code. Under well-established case law, Dr. Agouris, in forming her opinions, appropriately obtained factual information from a programming specialist, Joseph Wroblewski. Dr. Agouris supervised Mr. Wroblewski's work, and he simply translated the LACE source code language — a precise factual process — and provided her with the resultant mathematical, factual data. Mr. Wroblewski's translation is of the type on which experts in the digital imaging field ordinarily and routinely base their opinions. Particularly where HP has the ability to highlight any alleged deficiencies in Dr. Agouris's analysis during cross examination, there is no ground on which to exclude any portion of Dr. Agouris's testimony. HP's motion should be denied.

## **III. STATEMENT OF FACTS**

The parties agree that the relevant field of the patent-in-suit is digital image processing. D.I. 151, Ex. C, Rebuttal Expert Report of Dr. Peggy Agouris Regarding U.S. Patent No. 4,829,381 at 32; D.I. 190, Ex. A, Expert Report of Dr. Rangaraj Rangayan at ¶ 122. Dr. Agouris is an expert in digital image processing:

- Dr. Agouris has worked in the specific field of digital image processing and analysis for twenty years.
- Dr. Agouris is a tenured full professor in the College of Science at George Mason University, specializing in digital image processing and analysis. She has taught graduate and undergraduate level courses in digital image processing and analysis. As both an academic advisor and committee chair, Dr. Agouris supervises doctoral dissertations and Master's theses in the field of digital image processing and analysis, and has graduated several Ph.D. students who are now professors.
- Dr. Agouris has written more than 75 relevant articles in or related to the field of digital image processing and analysis. Dr. Agouris has edited books and journal articles in the field of digital image processing and analysis. Because of her expertise, Dr. Agouris has served as a reviewer of manuscripts, scientific papers and research proposals for various national and international organizations related to the field of digital image processing.
- Dr. Agouris is regularly asked to speak as an expert in the field of digital image processing and to chair related conferences.

*See* D.I. 151, Ex. B, Expert Report of Dr. Peggy Agouris Regarding U.S. Patent No. 4,829,381 at

4. HP does not — and cannot — dispute Dr. Agouris's expertise in digital image processing.

Contrary to HP's assertions, Dr. Agouris also has been formally trained to read — and is able to recognize and read — C++ source code language. Ex. 1, P. Agouris Dep. Tr. at p. 56, line 21–p. 57, line 5; Ex. 2, P. Agouris Declaration (“P. Agouris Decl.”) at ¶ 4. Dr. Agouris has experience programming in C language and has repeatedly done so. Ex. 1, P. Agouris Dep. Tr. at p. 56, line 21–p.57, line 2; p. 59, lines 5–15.

During her deposition, Dr. Agouris specifically demonstrated her source code knowledge and skill in correctly identifying source code for HP's counsel as C++. Ex. 1, P. Agouris Dep. Tr. at p. 51, lines 14–21. After establishing her ability to easily recognize and read source code, Dr. Agouris modestly testified at her deposition that she does not technically consider herself to be an expert in source code precisely because she has been focused on more complex, higher level, digital image processing research and analysis: “I have been focusing more on higher

level analysis and algorithms and research related to this, and that's why I do not feel that I am an expert and have to reply to any such questions." *Id.* at p. 57, lines 2–5.

One of Dr. Agouris's roles in this case was to determine whether HP infringed the patent-in-suit. One of her steps in this process was to identify and analyze the algorithms embodied in the LACE source code: "[m]y work in this case was to see if the algorithm used in LACE and the algorithm included in the patent were the same thing, were actually really doing the same thing, including the same things." *Id.* at p. 55, lines 6–10.

HP does not — and again, cannot — dispute that this case is about *LACE algorithms implemented in source code*, and not the source code by itself:

It's a different thing writing things in code and a different thing explaining things in an algorithm or a patent or on a paper where you have to express all the steps that are in between. So, in my discussion [in my report], I tried to reconstruct the steps that led to this expression, the one that is included in the code, because the code itself has no purpose of presenting all the intermediate steps. Its focus is on doing the job.

*Id.* at p. 56, lines 9–17. [REDACTED]

[REDACTED] There is no question that the algorithms identified, analyzed and explained by Dr. Agouris in the context of the field of digital image processing — and not the source code's programmatic representation of the algorithm — is what is at issue here. Ex. 1, P. Agouris Dep. Tr., at p. 122, lines 5–12.

Although Dr. Agouris is qualified to perform a source code translation on her own, here, at Dr. Agouris's direction, Joseph Wroblewski performed the routine function of translating the source code representation of the LACE algorithms into mathematical data representations. Ex. 2, P. Agouris Decl. at ¶¶ 10, 14; Ex. 4, J. Wroblewski Decl. at ¶ 4. These mathematical

representations are factual and easily verifiable by others as the process is a straightforward and mechanical one. Ex. 4, J. Wroblewski Decl. at ¶ 7. Mr. Wroblewski provided these basic mathematical data representations from the code language to Dr. Agouris, who in turn considered and transformed them into mathematical representations of the algorithms. Ex. 2, P. Agouris Decl. at ¶¶ 7–8; Ex. 4, J. Wroblewski Decl. at ¶ 4.

Mr. Wroblewski was qualified to serve as Dr. Agouris’s translator. Ex. 4, J. Wroblewski Decl. at ¶ 2 and Exhibit 1 thereto. He is a software engineer/architect with over twenty-four years of experience. *Id.* He is an expert developer in numerous languages, including C++. *Id.* Moreover, Mr. Wroblewski has consulted for many major corporations, designing software in C++, including multi-threaded C++ applications, among other related tasks. *Id.*

Dr. Agouris’s use of Mr. Wroblewski’s translations (which she supervised) was simply as an additional data point to confirm her own translations. Ex. 2, P. Agouris Decl. at ¶ 10; Ex. 4, J. Wroblewski Decl. at ¶ 4. For example, meetings between Dr. Agouris and Mr. Wroblewski were generally face-to-face, during which times Dr. Agouris would first explain to Mr. Wroblewski her initial translation of the relevant pieces of source code (such as operative algorithms) and Mr. Wroblewski would confirm that he agreed with her translation. Ex. 2, P. Agouris Decl. at ¶ 11; Ex. 4, J. Wroblewski Decl. at ¶ 4. Mr. Wroblewski would provide Dr. Agouris the basic code context into which the algorithms she had identified fit in a more overarching way. Ex. 2, P. Agouris Decl. at ¶ 12; Ex. 4, J. Wroblewski Decl. at ¶ 6.<sup>1</sup> Through this process of Mr.

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<sup>1</sup> In contrast to HP’s apparent quibble with the irrelevant semantics of the word “analysis,” used by Dr. Agouris during her deposition, Mr. Wroblewski’s role was not to analyze any aspects of the code with respect to infringement, but simply to provide the more routine function of data translation. Ex. 2, P. Agouris Decl. at ¶¶ 9, 13; Ex. 4, J. Wroblewski Decl. at ¶¶ 7, 9.



Wroblewski systematically providing basic factual and mathematical translation data at Dr. Agouris's direction, Dr. Agouris was able to focus her primary efforts on the real issue — analyzing the algorithms.

#### **IV. ARGUMENT**

##### **A. Dr. Agouris's Testimony Meets Rule 702 Requirements.**

For admissibility under Federal Rule of Evidence 702, an expert's testimony must be: (1) supported by "skill or knowledge greater than the average layman"; (2) reliable, "based on the 'methods and procedures of science' rather than on 'subjective belief or unsupported speculation'"; and (3) relevant and helpful to the trier of fact. *See, e.g., Izumi Prods. Co. v. Koninklijke Philips Elecs N.V.*, 315 F. Supp. 2d 589, 600 (D. Del. 2004) (citing *Elcock v. Kmart Corp.*, 233 F.3d 734, 741 (3d Cir. 2000)) (finding the proffered expert sufficiently qualified to render an opinion); *Eaton Corp. v. Parker-Hannifin Corp.*, 292 F. Supp. 2d 555, 567-68 (D. Del. 2003) (denying motion to strike expert testimony); *Waldorf v. Shuta*, 142 F.3d 601, 625-27 (3d Cir. 1998) (holding the district court did not abuse its discretion in qualifying expert witness); *See United States v. Mathis*, 264 F.3d 321, 335-38 (3d Cir. 2001) finding disputed testimony sufficiently relevant for purposes of Rule 702.

As discussed more fully below, Dr. Agouris's testimony meets these requirements of relevance, skill and reliability. First, her testimony is relevant: Polaroid has proffered her as an expert in the field of digital image processing, the field pertinent to the patent-in-suit, and she will address issues of infringement from such a perspective. Likewise, Dr. Agouris is highly skilled in this field. She has years of pertinent education, leadership, experience, teaching and research. Finally, Dr. Agouris's testimony is sufficiently reliable. She has relied only on those sources upon which one in her field would ordinarily rely and she performed her analysis using accepted practices. Thus, there exists no basis to exclude Dr. Agouris's testimony.

HP does not — and cannot — contend that the content and operation of the actual code language utilized in HP’s software is in dispute. To the contrary, HP’s own expert identified, translated and interpreted the operation of all applicable code language in the same way as Dr. Agouris. *Compare* D.I. 151, Ex. B at 15–20 *with* D.I. 185, Affidavit of Dr. Robert L. Stevenson at ¶¶ 23–26. [REDACTED]

[REDACTED] D.I. 137 at 19, ¶ 34; *see also* D.I. 185 at ¶ 24. This representation is precisely the same representation that Dr. Agouris identified in HP’s source code as the infringing algorithm. D.I. 151, Ex. B at 29.

HP’s contentions that Dr. Agouris declined to answer certain source code-based questions during her deposition and that she testified she does not intend to discuss source code at trial are make weight. Dr. Agouris is not planning to testify about source code at trial. Dr. Agouris’s expert analysis hinges not on the code language, per se, but properly on the algorithms that she has identified as being represented therein. As she explained in her deposition, it is these algorithms — represented in a manner that reflects what is actually occurring in a way consistent with image science — that are the “more true representation” of ... “what is happening [in LACE] and why it is happening,” as compared with the source code itself. Ex. 1, P. Agouris Dep. Tr. at p. 122, lines 5–12. Thus, it is these algorithms that form the basis of Dr. Agouris’s opinions and there is no question that her testimony is relevant.

There also is no question that Dr. Agouris is fully qualified under *Daubert* to identify and/or analyze these algorithms in the context of the ’381 patent. *See* D.I. 151, Ex. B, at 4. Dr. Agouris has twenty years of experience in the field and has written a wealth of relevant scholarly

writings. *Id.* She is a tenured full professor, specializing in digital image processing and analysis. *Id.* She teaches and advises in the area of digital image processing in addition to serving as a reviewer of manuscripts, scientific papers and research proposals related to the field. *Id.* Moreover, she is routinely invited to speak as an expert in the field of digital image processing and chair related conferences. *Id.*

That Dr. Agouris is well qualified to analyze the claims of infringement in this case is also underscored by the parties' respective assertions relating to the relevant level of ordinary skill in the art related to the '381 patent. In her rebuttal expert report, Dr. Agouris contends the appropriate level of skill is a "college degree in a technical field with one to two years experience with digital image enhancement." D.I. 151, Ex. C at 32. HP's technical expert, meanwhile, suggested a similar level of skill: "a Bachelor's degree in electrical engineering and two years of coursework or practical experience directed to digital signal or image processing." D.I. 190, Ex. A at ¶ 122. HP's unsupported suggestion now that source code expertise, rather than digital image processing expertise, is required is factually inaccurate and contrary to HP's position during discovery.

HP's similar contention that Dr. Agouris should be precluded from opining that hardware and software are equivalent as means to perform the function stated in claims 1–3 of the '381 patent because Dr. Agouris allegedly "cannot read, does not understand, and has not analyzed LACE software" is equally unpersuasive. D.I. 168, at 8-9. Dr. Agouris is capable of reading source code, can understand source code, and has spent hours upon hours analyzing LACE software. Ex. 2, P. Agouris Decl. at ¶¶ 4, 6. Dr. Agouris possesses digital image processing expertise that spans across various media, including hardware and software, and that is what qualifies her to provide expert opinions in this case. *Id.* at ¶ 3.

**B. Dr. Agouris's Testimony Meets Rule 703 Requirements.**

Pursuant to Federal Rule of Evidence 703, an expert is entitled to rely on facts or data that are of a type reasonably relied upon by experts in the particular field. FED. R. EVID. 703. Federal Rule of Evidence 703 also expressly authorizes an expert to base her opinion on interviews and reports prepared by non-testifying third parties if they are “of a type reasonably relied upon by experts in the particular field.” *See, e.g., In re Sulfuric Acid Antitrust Litig.*, 235 F.R.D. 646, 654 (N.D. Ill. 2006); *Westfield Ins. Co. v. Harris*, 134 F.3d 608, 613 (4th Cir. 1998) (reversing district court exclusion of expert report where expert’s reliance on another investigator’s work was of the type reasonably relied upon by experts in the field); *Ries v. CSX Transp., Inc.*, No. Civ. A. 96-3325, 2000 WL 377509, at \*2 (E.D. Pa. Mar. 29, 2000) (citing *Lewis v. Rego Co.*, 757 F.2d 66, 74 (3d Cir. 1985)) (finding judge did not err in permitting expert to offer testimony based, in part, on the opinions of a deceased expert and to disclose that opinion in order to explain the basis for his own conclusions).

As HP’s own cited case law makes clear, “it is common in technical fields for an expert to base an opinion in part on what a different expert believes on the basis of expert knowledge not possessed by the first expert.” *See e.g., D.I. 168 at 5* (citing *Dura Auto. Sys. of Ind., Inc. v. CTS Corp.*, 285 F.3d 609, 613 (7th Cir. 2002)). Furthermore, “it is apparent from the wording of Rule 703 that there is no general requirement that the other expert testify as well.” *Id.* (emphasis omitted). Experts can base their opinions on the opinions of non-testifying experts as long as they “bring to bear [their] own expertise on the underlying data.” *Sulfuric Acid*, 235 F.R.D. at 657–58 (allowing expert to testify to opinion that was based on survey conducted by non-testifying expert, when testifying expert understood generally how the surveys were conducted). In such cases, the testifying expert is more than just a mere “mouthpiece” for the non-testifying expert. *Id.* at 657; *see also Dura Auto.*, 285 F. Supp. at 614. When a testifying expert has relied

on a non-testifying expert in a way that comports with this standard, the non-testifying expert need not be disclosed as an expert witness under Federal Rule of Civil Procedure 26(a)(2). *Sulfuric Acid*, 235 F.R.D. at 658; *see also* Fed. R. Civ. P. 26(a)(2).

This court has found *Daubert* motions to be “frivolous” when made based on the argument that an expert witness must rely only on her own personal knowledge. *See LML Patent Corp. v. Telecheck Servs., Inc.*, No. Civ. 04-858 (SLR), 2006 WL 839377, at \* 1 (D. Del. Mar. 28, 2006) (stating that “[c]ounsel for plaintiff may test, on cross examination, the reliability of the sources of information”). Because Dr. Agouris simply relied on Mr. Wroblewski to provide the sorts of information that others in her field would likewise obtain in a similar fashion, and because HP’s counsel can test the reliability of her sources on cross-examination, Dr. Agouris should be allowed to testify regarding her objected to opinions. *See Sulfuric Acid*, 235 F.R.D. at 653.

Mr. Wroblewski’s translation in this case is of a type reasonably relied upon by digital imaging experts and thus constitutes a permissible basis for Dr. Agouris’s opinions pursuant to Rule 703. The translation performed by Mr. Wroblewski was not an activity that required judgment or discretion; rather, it is a precise factual process that can be verified by others.<sup>2</sup> Ex. 2, P. Agouris Decl. at ¶ 9; Ex. 4, J. Wroblewski Decl. at ¶¶ 7–8; *see Dura Auto.*, 285 F.3d at 614–15 (considering favorable implications of “cut and dried procedures” as opposed to exercise of judgment or discretion when evaluating others’ inputs into an expert’s analysis). Mr. Wroblewski provided no opinions to Dr. Agouris relating to the LACE source code, but simply

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<sup>2</sup> HP refers to Mr. Wroblewski as “more than [a] mere data-collector,” but fails to provide any basis for this characterization. D.I. 168 at 5.

provided basic translation data inputs for Dr. Agouris's further work. Ex. 2, P. Agouris Decl. at ¶¶ 9, 13; Ex. 4, J. Wroblewski Decl. at ¶ 9.

It is undisputed that Mr. Wroblewski's translation is accurate and reliable. HP does not — and cannot — contend that Mr. Wroblewski's code translation was in error in any way. Moreover, this type of translation input is often considered by experts, such as Dr. Agouris, allowing the expert to more efficiently focus her time on the digital image processing analysis in question, rather than on the mechanical translation function. Ex. 2, P. Agouris Decl. at ¶¶ 16–18; *see Titan Stone, Tile & Masonry, Inc. v. Hunt Const. Group*, 2007 WL 1659056, at \*4 (D.N.J. June 5, 2007) (finding expert's reliance on third party's work permissible when third party “merely extracted and presented raw data to [expert] in format that was more user-friendly and manageable”).

A good analogy for the exchange of information between Dr. Agouris and Mr. Wroblewski in this case is the relationship between a doctor attempting to decipher medical records in another language and a translator he hires to help him do so. Although the medical translator explains what the words mean from a linguistic perspective, he or she offers no insights into the medical meaning of the words. In much the same way, Mr. Wroblewski did not provide insights into the meaning of the code, but instead simply translated the code language itself.

HP broadly asserts that “any testimony by Dr. Agouris about the LACE source code will also constitute hearsay evidence.” D.I. 168, at 9. Even if Dr. Agouris were planning to testify about the LACE source code, this argument goes too far. First of all, testimony from Dr. Agouris regarding her independent translation of any elements of the source code is not hearsay at all, as it is not an out-of-court statement. Likewise, the fact that she may have, in certain

situations, discussed or verified her own translation with Mr. Wroblewski does not make her own translation hearsay; rather, only testimony about her conversations with Mr. Wroblewski would potentially fall within the purview of Federal Rule of Evidence 801(c). Even then, however, testimony from Dr. Agouris regarding her specific interactions with Mr. Wroblewski would not be offered for the truth of the matter asserted (*i.e.* the contents of the source code) but rather to establish the general methodology by which she arrived at her algorithms. Thus, by definition, the testimony would be non-hearsay. *See* FED. R. EVID. 801(c). *C.f.* D.I. 168, at 9 (*citing Malletier v. Dooney & Bourke, Inc.*, 525 F. Supp. 2d 558, 664–66 (S.D.N.Y. 2007) (considering situation where out-of-court statements of second expert would be offered by first expert for the truth of the other expert’s opinion)).

Moreover, in further contrast to HP’s case law, Dr. Agouris is not attempting to offer opinions in areas wholly outside her area of expertise or adopt the opinions of another as her own. *See* D.I. 168, at 5 (*citing Malletier*, 525 F. Supp. 2d at 664–66 (excluding first proffered expert who attempted to center his testimony around a regression analysis, conducted by a second non-testifying expert, where first expert was “not qualified to conduct or interpret statistical analyses.”); *Bouygues Telecom, S.A. v. Tekelec*, 472 F. Supp. 2d. 722, 729-730 (E.D.N.C. 2007) (excluding portions of expert reports that adopted wholesale the opinion of withdrawn experts verbatim and distinguishing situation where a first expert relied on another expert’s analysis and first expert had the opportunity to “review for error and independently verify the analysis.” (internal citations omitted))). Contrary to HP’s assertion that Dr. Agouris “could not” supervise Mr. Wroblewski’s translation in this case, Dr. Agouris’s training and experience reading and writing source code programming enabled her to review his translation for accuracy as the two proceeded, especially as they were working closely together during this

process. D.I. 168 at 1; Ex. 2, P. Agouris Decl. at ¶ 15; *see McReynolds v. Sodexho Marriott Servs, Inc.*, 349 F. Supp. 2d 30, 37 (D.D.C. 2004) (finding expert's testimony sufficiently reliable to be admitted, due to extensive "hand-in-glove" collaboration between expert and assistant who ran the programming analysis). Because Mr. Wroblewski was not exercising professional judgment or any expertise that went beyond Dr. Agouris's ken, there is no basis for his translation to be challenged at this juncture. *See Dura Auto.*, 285 F.3d at 613.

Even if Mr. Wroblewski's translations in this case are said to rise to the level of expert work and is found to constitute provision of opinions rather than mere facts or data, Dr. Agouris is nonetheless permitted under the case law to rely on his translations of the LACE code. Unlike cases where testifying experts have been precluded from acting as a "mouthpiece" for non-testifying experts, including cases cited by HP in its brief, Dr. Agouris's opinions are based on her own undisputed expertise in digital image processing. In cases such as this one, courts have allowed one expert to incidentally rely on another where the real analysis at issue is done by the testifying expert. *See, e.g., In re Sulfuric Acid Antitrust Litig.*, 235 F.R.D. 646, 657–58 (N.D. Ill. 2006). Indeed, as Dr. Agouris explained, she does not even intend to discuss the underlying code translated by Mr. Wroblewski because it simply is not germane to the question of infringement. Ex. 1, P. Agouris Dep. Tr. at p. 57, line 25–p. 58, line 3; *see Sulfuric Acid*, 235 F.R.D. at 657 (differentiating situation therein from cases where experts were excluded because situation therein did not require expert to present third party's opinions at trial) Courts have further acknowledged that "the leader of a clinical medical team [need not] be qualified as an expert in every individual discipline encompassed by the team in order to testify as to the team's conclusions." *Walker v. Soo Line R.R.*, 208 F.3d 581, 589 (7th Cir. 2000); *Dura Auto*, 285 F.3d at 613.



Because Dr. Agouris simply relied on Mr. Wroblewski to provide information that others in her field would likewise obtain in a similar fashion, and because HP's counsel can test the reliability of her sources on cross-examination, Dr. Agouris should be allowed to testify regarding her objected to opinions.

**C. Polaroid Properly Disclosed Mr. Wroblewski During Discovery, And HP Chose Not To Depose Him.**

HP's contention that portions of Dr. Agouris's opinions must be excluded because Mr. Wroblewski was not disclosed is legally and factually unsupportable. *See, e.g.*, D.I. 168 at 1, 3 (stating that Mr. Wroblewski's "qualifications as an expert, his potential bias, his methodology, his actual opinions and the reasons for his opinions are entirely unknown.").

*First*, Polaroid is not proffering Mr. Wroblewski as an expert, and there is no legal requirement that a third party considered or relied upon by an expert must also himself testify or be disclosed as an expert witness. *Dura Auto.*, 285 F.3d at 613; *Sulfuric Acid*, 235 F.R.D. at 658; *see also* Fed. R. Civ. Pro. 26(a)(2). Indeed, even the case law cited by HP for its argument that Mr. Wroblewski should have provided an expert report specifically holds to the contrary. *Sulfuric Acid*, 235 F.R.D. at 657-59 (holding plaintiffs did not improperly fail to disclose under Federal Rule of Civil Procedure 26(c) multiple witnesses who supplied data used in formulating expert reports). In *Dura Automotive*, also cited by HP for this proposition, a proffered expert relied on assistants who "did not merely collect data for him to massage or apply concededly appropriate techniques in a concededly appropriate manner"; rather, they made discretionary choices and applied techniques that the expert could not verify were appropriately chosen and applied. *Dura Auto.*, 285 F.3d at 615. Thus, the court determined the assistants were offering expert opinions that should have been disclosed. *Id.* However, the court also explained the general rule in this regard: "[a]n expert witness is permitted to use assistants in formulating his

expert opinion, and normally they need not themselves testify. The opposing party can depose them in order to make sure they performed their tasks competently . . . .” *Id.* at 613 (emphasis and internal citations omitted). In the present case, where Mr. Wroblewski was performing routine translations that could be easily verified by Dr. Agouris, Mr. Wroblewski exercised no discretion but simply worked at Dr. Agouris’s direction, and Dr. Agouris is bringing to bear her own expertise rather than relaying any opinions from Mr. Wroblewski, the general rule should apply: Mr. Wroblewski need not be disclosed under Rule 26(c).

*Second*, Polaroid specifically disclosed Mr. Wroblewski’s resume and follow-up information to HP *more than a year ago*. Ex. 5, March 13, 2007 letter to M. Bernstein, attaching resume; Ex. 6, March 15, 2007 letter to M. Bernstein. In response, HP stated that it “has no objections to Polaroid’s disclosure of materials to Mr. Wroblewski under the terms of the Protective Order.” Ex. 7, March 16, 2007 letter to G. Gerst.

After Dr. Agouris disclosed her consideration of Mr. Wroblewski’s source code translations in her expert report, HP chose not to depose Mr. Wroblewski or even to question Dr. Agouris about Mr. Wroblewski’s translations. *Dura Auto.*, 285 F.3d at 613 (“The opposing party can depose [an expert’s assistants] to make sure they performed their tasks competently.”); *Sulfuric Acid*, 235 F.R.D. at 658 (“Under the liberalizing thrust of Rule 703, experts are entitled to use assistance in formulating expert opinion, and the aiders need not themselves testify. The opposing party can depose them to ensure that their information gathering tasks were performed competently.”).

*Third*, even without deposing Mr. Wroblewski, HP had every opportunity to reconstruct his translations to identify any errors. *See Sulfuric Acid*, 235 F.R.D. at 659 (pointing out the at-issue underlying data for plaintiffs’ expert analysis came from defendants’ files). The code that

formed the basis of Mr. Wroblewski's translations is the property of HP itself. Ex. 2, P. Agouris Decl. at ¶ 5.

**D. Dr. Agouris's Testimony Meets Rule 705 Requirements.**

Pursuant to Federal Rule of Evidence 705, Dr. Agouris is permitted to disclose to the fact finder during her testimony in this case that Mr. Wroblewski performed a routine code translation role to generate mathematical data inputs to her infringement analysis. *See* FED. R. EVID. 705. She is likewise entitled to explain that it provides nothing more than a context for her own opinions. *See, e.g., Ries*, 2000 WL 377509, at \*2 (*citing Lewis*, 757 F.2d at 74) (permitting one expert to disclose another expert's opinion on which he relied to explain the basis for his opinions). Even though a lay witness might be prohibited from disclosing similar conversations or interactions he or she might have had with Mr. Wroblewski, because Dr. Agouris's interactions with Mr. Wroblewski are of the type "on which experts in the field base their opinions," an expert such as Dr. Agouris should be permitted to disclose them. *See Lewis*, 757 F.2d at 74.

**V. CONCLUSION**

For the foregoing reasons, Polaroid respectfully requests the Court deny HP's Motion to Preclude Certain Testimony of Polaroid's Expert Dr. Peggy Agouris.

MORRIS, NICHOLS, ARSHT & TUNNELL LLP

*/s/ Julia Heaney*

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Corporation*

June 12, 2008  
2367589

**CERTIFICATE OF SERVICE**

I, the undersigned, hereby certify that on June 26, 2008, I electronically filed the foregoing with the Clerk of the Court using CM/ECF, which will send notification of such filing(s) to the following:

William J. Marsden, Jr.  
FISH & RICHARDSON P.C.

I also certify that copies were caused to be served on June 26, 2008 upon the following in the manner indicated:

**BY E-MAIL**

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*/s/ Julia Heaney*

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Julia Heaney (#3052)

# **Exhibit 1**

Deposition of  
**PEGGY AGOURIS, PhD**

**Date:** May 6, 2008

**Volume:** 1

**Case:** POLAROID v. HP

SHARI MOSS & ASSOCIATES

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THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF DELAWARE

POLAROID CORPORATION, )  
Plaintiff and )  
Counterclaim Defendant, ) Case No.  
-vs- ) 06-738 (SLR)  
HEWLETT-PACKARD COMPANY, )  
Defendant and )  
Counterclaim Plaintiff. )

The videotaped deposition of  
DR. PEGGY AGOURIS, called by the Defendant and  
Counterclaim Plaintiff for examination, taken  
pursuant to the Federal Rules of Civil Procedure of  
the United States District Courts pertaining to the  
taking of depositions, taken before CORINNE T.  
MARUT, C.S.R. No. 84-1968, a Notary Public within  
and for the County of DuPage, State of Illinois,  
and a Certified Shorthand Reporter of said state,  
at the offices of Kirkland & Ellis LLP, Suite 5400,  
200 East Randolph Drive, Chicago, Illinois, on the  
6th day of May, A.D. 2008, commencing at 9:10 a.m.



1 PRESENT:

2  
3 KIRKLAND & ELLIS LLP,  
4 (200 East Randolph Drive,  
5 Chicago, Illinois 60601,  
6 312-861-2307), by:  
7 MS. MICHELLE WARE SKINNER,  
8 skinnerm@kirkland.com,  
9 appeared on behalf of the  
10 Plaintiff and Counterclaim Defendant;

11  
12 MINTZ LEVIN COHN FERRIS GLOVSKY AND POPEO PC,  
13 (5355 Mira Sorrento Place, Suite 600,  
14 San Diego, California 92121-3039,  
15 858-320-3000), by:  
16 MR. JOHN GIUST,  
17 jgiust@mintz.com,

18 -and-

19  
20 CHOATE HALL & STEWART LLP,  
21 (Two International Place,  
22 Boston, Massachusetts 02110,  
23 617-248-5000), by:  
24 MR. CARLOS PEREZ-ALBUERNE,  
25 cperez@choate.com,  
appeared on behalf of the  
Defendant and Counterclaim Plaintiff.

VIDEOTAPED BY:

JOE CIRILLO, A-One Legal Video.

REPORTED BY: CORINNE T. MARUT, C.S.R. No. 84-1968

1 THE VIDEOGRAPHER: My name is Joseph Cirillo  
2 in association with A-1 Legal Video. My address is  
3 1130 Hassell Road, Hoffman Estates, Illinois.

4 Today's date is May 6, the year 2008.  
5 The time is now 9:10 a.m.

6 The location of this deposition is  
7 Kirkland & Ellis, 200 East Randolph, 54th floor,  
8 Chicago, Illinois.

9 This deposition is being taken in the  
10 matter of Polaroid Corporation, Plaintiff and  
11 Counter-Defendant, vs. Hewlett-Packard Company,  
12 Defendant and Counter-Plaintiff, Case No. 06-738.

13 The deponent's name is Dr. Peggy  
14 Agouris.

15 This deposition is being taken on behalf  
16 of Defendant. The party at whose instance the  
17 deposition is being recorded on an audiovisual  
18 recording device is the Defendant.

19 Counsel, would you please identify  
20 yourselves for the record.

21 MR. GIUST: John Giust from Mintz Levin  
22 representing Hewlett-Packard.

23 MR. PEREZ: Carlos Perez from Choate Hall &  
24 Stewart representing Hewlett-Packard.

25 MS. SKINNER: Michelle Skinner representing

1 Polaroid Corporation from Kirkland & Ellis LLP.

2 THE VIDEOGRAPHER: We are going off the record  
3 at 9:11 a.m.

4 (WHEREUPON, discussion was had off  
5 the record.)

6 THE VIDEOGRAPHER: We're back on the record at  
7 9:12 a.m.

8 Will the Court Reporter please swear the  
9 witness.

10 (WHEREUPON, the witness was duly  
11 sworn.)

12 DR. PEGGY AGOURIS,  
13 called as a witness herein, having been first duly  
14 sworn, was examined and testified as follows:

15 EXAMINATION

16 BY MR. GIUST:

17 Q. Good morning, Dr. Agouris.

18 A. Good morning.

19 Q. Could you please state and spell your  
20 name for the record.

21 A. Last name Agouris, A-g-o-u-r-i-s. First  
22 name Peggy, P-e-g-g-y.

23 Q. And where do you reside?

24 A. In Fairfax, Virginia.

25 Q. Okay. And how long have you lived in

1 and consulted with him?

2 A. Yes. I asked the lawyers at Kirkland &  
3 Ellis to provide me with a source code expert to  
4 work with because I'm not a source code expert.

5 Q. All right. And they introduced you to  
6 Joe?

7 A. Yes.

8 Q. And what did you ask Joe to do?

9 A. To look into all the pieces of code,  
10 analyze it and to communicate with me all the  
11 pieces of information that I needed to know for my  
12 expert report, namely, the algorithms and what's  
13 going on.

14 Q. Okay. And, so, he located here on --  
15 what page?what page are we on? Yes. On 26.

16 He is the one that gave you the values  
17 to fill in these tables here?

18 A. Yes.

19 Q. And as far as you know he got those  
20 values from the source code?

21 A. Yes.

22 Q. And the source code being the type of  
23 code that's shown in Exhibit 7 to your deposition?

24 A. Yes.

25 Q. Now, there is an equation on page 28

1 that says verify equals?

2 A. 28. Page 28? Yes.

3 Q. And did he go into the code and extract  
4 those equations for you as well?

5 A. Yes.

6 Q. And he provided you with that equation  
7 as well as what the various terms within that  
8 equation meant?

9 A. Yes.

10 Q. Okay. So, when you discuss how LACE  
11 operates on pages 19 and it continues on to  
12 page 20, are you using the results of the source  
13 code analysis that Joe gave you?

14 A. Yes.

15 Q. Now, you said earlier that you did not  
16 analyze the LACE Estimate part of the code.

17 Do you know whether Joe estimated -- let  
18 me start over.

19 Do you know whether -- let me start over  
20 again.

21 My question to you is whether Joe  
22 analyzed the LACE Estimate portions of the code.

23 A. I don't know about that, but we didn't  
24 discuss it because it was not pertinent to this  
25 case.

1 Q. There is another issue that came up in  
2 Dr. Stevenson's report related to exif tags,  
3 e-x-i-f. Do you recall reading that?

4 A. Can you please repeat that?

5 Q. Do you know what an exif tag is,  
6 e-x-i-f?

7 A. No.

8 Q. Do you recall seeing that --

9 A. Yes.

10 Q. -- in Dr. Stevenson's report?

11 A. But as I said, I'm not going to go into  
12 code-related.

13 Q. Okay. Did you ask Joe to look at any  
14 issues relating to exif tags?

15 A. Well, no, I haven't asked him personally  
16 because it was not really related to my opinion.

17 Q. If it turns out that LACE Apply is never  
18 used, don't you think that would be relevant to  
19 your opinion?

20 A. We discussed that and it would be  
21 relevant to my opinion if it were never used, but  
22 this is not the case here.

23 Q. And how do you know it's not the case?

24 A. I know it because I discussed it with  
25 the source code expert and reviewing all the code,

1 we know that this is a piece of code dealing with  
2 image enhancement which is available in the  
3 software and which is used automatically or  
4 manually to enhance imagery.

5 Q. Right. But if you didn't analyze the  
6 LACE Estimate part, how would you know whether --

7 A. I'm not saying --

8 Q. -- it actually gets used --

9 A. Sorry.

10 Q. -- in the automatic mode?

11 A. I'm not saying that he didn't. I'm just  
12 saying that I didn't include it in this report  
13 because my focus was on the Apply thing. And based  
14 on my understanding, discussing with him and  
15 reviewing the information that was derived from the  
16 code, it is used.

17 Q. So, if I were to go into the source code  
18 with you, would you be able to answer questions  
19 about how the source code works?

20 A. No.

21 Q. Have you had any formal training in C  
22 language?

23 A. I did.

24 Q. And how long ago was that?

25 A. Well, it was back in school and I did

1 some programming myself in the beginning of my  
2 career. But I have been focusing more on higher  
3 level analysis and algorithms and research related  
4 to this, and that's why I do not feel that I am an  
5 expert and have to reply to any such questions.

6 Q. Okay. Even if I were to go back to this  
7 table here -- what is it -- on page 26 and direct  
8 your attention to Exhibit 7 to your deposition,  
9 would you be able to tell me where the entries in  
10 the table come from on Exhibit 7?

11 A. I'm able to tell you where they come  
12 from and -- but I'm not able to tell you really  
13 whether the table that is included here is a  
14 mistake. I just want to make sure that I reply to  
15 things that I'm comfortable and I know well.

16 So, it seems that I can look at it here,  
17 but really I'm not the right person to explain  
18 that.

19 Q. Okay. So, at trial, I just don't want  
20 to be surprised --

21 A. Yes.

22 Q. -- at trial when you start talking about  
23 source code?

24 A. Yes.

25 Q. You don't intend right now at trial to



1 discuss the source code, for example, as shown in  
2 Exhibit 7?

3 A. No. My opinion, which I would like to  
4 discuss, is based on an expert analyzing the code  
5 and me getting information from him.

6 Q. And did you meet with him in person to  
7 get this information?

8 A. Yes, yes, of course.

9 Q. Did he give you any written report about  
10 how the code worked?

11 A. No, we had meetings, extensive meetings  
12 to discuss this. I kept notes and these notes were  
13 based -- this report is based on these notes, which  
14 are really I was writing my report at the time.

15 Q. So, notes showing, for example, which  
16 files related to which versions --

17 A. Yes, yes.

18 Q. -- of LACE?

19 A. It was really part of my writing my  
20 report. So, while we were having the discussion I  
21 was typing and so...

22 Q. Are you competent professionally to go  
23 into the source code that HP uses?

24 A. What do you mean by that?

25 Q. Well, I mean as an -- would you consider

1     yourself competent in the area of computer  
2     programming to go into the HP source code and  
3     explain how it works?

4             A.     No.

5             Q.     You mentioned earlier that you had at  
6     least some courses --

7             A.     Yes.

8             Q.     -- on programming in C, right?

9             A.     Yes.

10            Q.     When do you think the last time you  
11     programmed in C was?

12            A.     Oh, it was a few years back.

13            Q.     Did you -- before you had courses in C,  
14     did you have courses in Fortran?

15            A.     Yes, yeah. I don't want to give that  
16     away because it will tell you how old I am. But,  
17     yes, I did.

18            Q.     Okay. If you go to page 27, kind of in  
19     the middle of that top paragraph, it says,  
20     "'Strength' as used in the exponent, a, is simply a  
21     number."

22                    Do you see that?

23            A.     Let me go and find that. Is simply a  
24     number, yes.

25            Q.     And then it says, "Therefore, it can be

1 expressed as a combination of other numbers without  
2 changing its value."

3 Do you see that?

4 A. Yes.

5 Q. And, so, down here below you take the  
6 exponent "a" and you do some mathematical  
7 operations to it?

8 A. Yes.

9 Q. And you end up with y over Mid\_Tone  
10 minus 1 -- well, there is a lot of parentheses. I  
11 don't want to misstate the record.

12 But you end up with an expression at the  
13 bottom --

14 A. Um-hmm.

15 Q. -- with a y over Mid\_Tone --

16 A. Um-hmm.

17 Q. -- and with a D in it as well, right?

18 A. Yes.

19 Q. So, my question to you is: That bottom  
20 expression "a =" with the following numbers, that  
21 expression is actually not in the HP code, is it?

22 A. No, the expression in HP code is the  
23 first one.

24 Q. Is the a equal 2 raised to the power of  
25 y minus Mid\_Tone and that quantity multiplied by

1 A. This is what you have right now.

2 Q. And now you have  $\Delta T$  times  $X$ ?

3 A. You have  $\Delta T$  times  $X$  added as a  
4 term to the factor that is  $T$ .

5 So, actually what you have is your new  
6 verify is based on  $T$ , which is the exact same  
7 thing, scaled down and adding back a portion of the  
8 original image to maintain the character of the  
9 image.

10 Q. Right. Isn't that different than just  
11 doing the end of the equation by itself? It has to  
12 be because you add a complete new term to the  
13 equation?

14 A. It's not different in the sense that the  
15 function of what's happening remains the same.

16 What happens is that when you do  
17 boosting, which is really what's happening here,  
18 you -- you retain a portion of the initial image  
19 just to make sure that variation is not lost in the  
20 process. And this is really what happens here.

21 Q. When you say boosting, what do you mean  
22 by that?

23 A. That's a term that is used. It's  
24 digital image processing terms. It means that when  
25 you perform an operation over an image and you

1 smooth it, let's say, you lose character there.

2 So, in order to maintain what the  
3 results of what you did because the main operation  
4 has been smoothing, let's say, in this example, you  
5 add back a portion of the original image. It's --  
6 it's only to show a little bit of variation,  
7 maintain the variation of the initial image and  
8 keeping the improvement that you have already  
9 performed.

10 So, the enhancement itself is not  
11 affected by it. It's only adding back a portion of  
12 the image to make the image not lose its whole  
13 character through the process.

14 Q. But the whole equation is the  
15 transformation of the image, not just the last  
16 part. I mean --

17 A. Of course. I mean, you --

18 Q. Verify is the Yout, isn't it?

19 A. Yes. But what -- look at the components  
20 of that. Look at how is the -- how is contrast  
21 enhancement performed here? Through temp. What is  
22 added to it is unenhanced image.

23 So, the contrast enhancement per se  
24 doesn't change. It's still the same thing. You  
25 scale it down in order to be -- to add back a

1 portion of the original scene that you do not --  
2 didn't have just to make sure that the values that  
3 you have are not really losing their character.

4 Q. So you --

5 A. And this is a -- this is an approach  
6 that is used to preserve the initial image  
7 character.

8 Q. Right. So you have done what you've  
9 done before --

10 A. Um-hmm.

11 Q. -- and then you have done something in  
12 addition to it to preserve the image character?

13 A. Yes.

14 Q. So, overall you are doing something  
15 different?

16 A. You do not do something different with  
17 respect to the enhancement part, no.

18 Q. I understand with respect to the  
19 enhancement part. With respect to the entire  
20 equation, you are doing something different?

21 A. I don't see it. Respectfully disagree,  
22 because what I see here is I see the same process  
23 to enhance -- to perform enhancement, which is  
24 through temp, some scaling that occurs to it to  
25 allow the portion of the original scene to be added

1           And when you write code, you compress  
2 all the elements that to make sure that your code  
3 is shortest and fastest; and this is -- you cannot  
4 really compare this expression with the code. You  
5 have to -- to compare it to what it means, and what  
6 it means is really what I'm saying right here.

7           So, even though the code itself does not  
8 perform the division, the operations that calculate  
9 this "a" include this portion in it according to  
10 this derivation here.

11           Q.     And I understand what you're saying.

12           A.     Yeah, okay.

13           Q.     But I want to know -- I think we need to  
14 know for trial --

15           A.     Um-hmm.

16           Q.     -- are you saying that the code actually  
17 performs the division of y over Mid\_Tone or are you  
18 saying that because I've done the derivation what  
19 the code does is the equivalent thing to dividing  
20 by y over Mid\_Tone?

21           A.     I believe that the code is not -- is  
22 using the -- is doing the equivalent.

23           Q.     And that's because of all these  
24 mathematical steps between the top and the bottom  
25 on page 27?

1           A.       Just because you cannot have a  
2       one-to-one correspondence between an algorithm and  
3       how it's implemented in code. That's the only  
4       reason.

5           Q.       So, you believe that the algorithm in  
6       the bottom of page 27 that you have arrived at is a  
7       more true representation of the concepts that are  
8       being done --

9           A.       Yes.

10          Q.       -- in the contrast enhancement?

11          A.       Yes. It is a representation of what is  
12       happening and why it is happening.

13          Q.       And your expression at the bottom,  
14       though, includes an extra term D at the end, right?

15          A.       Yes.

16          Q.       And D equals strength times Mid\_Tone,  
17       right?

18          A.       Yes.

19          Q.       Doesn't that expression, strength times  
20       Mid\_Tone, help you simplify the concepts of your  
21       equation if you were to multiply it through the  
22       value of Mid\_Tone?

23          A.       I don't understand the question.

24          Q.       In other words, why did you not take the  
25       strength times Mid\_Tone that's stored in D and



1 multiply the Mid\_Tone through and then you would  
2 just have a simpler expression that would be more  
3 true to the contrast enhancement that's going on?

4 A. My goal was not to simplify. My goal  
5 was to analyze where these values came from and  
6 what they mean. And this is what I tried to do.

7 Q. Right.

8 A. My goal was not to create an expression  
9 ready for code, because this is not my goal here.

10 Q. But isn't the -- if you wanted to get at  
11 a truer expression of what's happening in --

12 A. Um-hmm.

13 Q. -- the code in your equation --

14 A. Um-hmm.

15 Q. -- wouldn't you multiply through  
16 Mid\_Tone?

17 A. Multiply what through Mid\_Tone?

18 Q. Mid\_Tone from the D through the top of  
19 the equation.

20 A. No, I'm perfectly happy with how I have  
21 it because it really makes sense and it explains  
22 where these values are coming from and what they  
23 do.

24 MR. GIUST: All right. Why don't we take a  
25 break. It's been a while.

THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF DELAWARE

POLAROID CORPORATION, )  
Plaintiff and )  
Counterclaim Defendant, ) Case No.  
-vs- ) 06-738 (SLR)  
HEWLETT-PACKARD COMPANY, )  
Defendant and )  
Counterclaim Plaintiff. )

I hereby certify that I have read the foregoing transcript of my deposition given at the time and place aforesaid, consisting of Pages 1 to 245, inclusive, and I do again subscribe and make oath that the same is a true, correct and complete transcript of my deposition so given as aforesaid, and includes changes, if any, so made by me.

DR. PEGGY AGOURIS

SUBSCRIBED AND SWORN TO before me this                      day  
of                      , A.D. 200     .

Notary Public

SHARI MOSS & ASSOCIATES (650) 692-8900

1 STATE OF ILLINOIS )

2 ) SS:

3 COUNTY OF DU PAGE )

4 I, CORINNE T. MARUT, C.S.R. No. 84-1968,  
5 a Notary Public within and for the County of  
6 DuPage, State of Illinois, and a Certified  
7 Shorthand Reporter of said state, do hereby  
8 certify:

9 That previous to the commencement of the  
10 examination of the witness, the witness was duly  
11 sworn to testify the whole truth concerning the  
12 matters herein;

13 That the foregoing deposition transcript  
14 was reported stenographically by me, was thereafter  
15 reduced to typewriting under my personal direction  
16 and constitutes a true record of the testimony  
17 given and the proceedings had;

18 That the said deposition was taken  
19 before me at the time and place specified;

20 That the reading and signing by the  
21 witness of the deposition transcript was agreed  
22 upon as stated herein;

23 That I am not a relative or employee or  
24 attorney or counsel, nor a relative or employee of  
25 such attorney or counsel for any of the parties

1 hereto, nor interested directly or indirectly in  
2 the outcome of this action.

3 IN WITNESS WHEREOF, I do hereunto set my  
4 hand this 10th day of May, 2008.

5  
6  
7  
8 CORINNE T. MARUT, C.S.R. No. 84-1968  
9 Notary Public, DuPage County, Illinois.  
10 My commission expires August 15, 2009.  
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## I N D E X

DR. PEGGY AGOURIS	EXAMINATION
BY MR. GIUST.....	4
BY MR. GIUST.....	127

## E X H I B I T S

AGOURIS DEPOSITION EXHIBIT	MARKED FOR ID
No. 1 Expert Report of Dr. Peggy Agouris	5
No. 2 CV of Dr. Peggy Agouris	9
No. 3 Patent 4,829,381	20
No. 4 Joint Claim Construction	40
No. 5 Exhibit 9 to report, HP accused products according to code	42
No. 6 Exhibit 24 to report, HP accused products according to mode of invoking LACE	42
No. 7 Exhibit 23 to report, source code lace.h	50
No. 8 Exhibit 15 to report, source code	131
No. 9 Exhibit 39 to report, TRetinex.cpp	207
No. 10 Expert report of Dr. Schonfeld	219

## **Exhibit 2**

- IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF DELAWARE**

5. As part of my work in the above-captioned case, I considered and analyzed certain image enhancement source code, known as LACE, that is used by Hewlett-Packard Company.

6. Throughout my work on this case, I have spent over 20 hours analyzing the at-issue LACE software.

7. During my work in the above-captioned case, Mr. Joe Wroblewski provided me with a programmer's explanation of the code language, which I then turned into one or more algorithms.

8. Mr. Wroblewski's role was to help me identify and translate at-issue sections of the code for further analysis by myself alone.

9. Mr. Wroblewski provided me with verifiable facts and did not exercise discretion in his work.

10. My reliance on Mr. Wroblewski was, in many instances, simply a resource to confirm my inclinations about the workings of the LACE source code.

11. During my meetings with Mr. Wroblewski, I would oftentimes explain to him my understanding of the relevant pieces of source code (such as operative algorithms) and he would, in turn, confirm that he agreed with my analysis and explain why.

12. Moreover, as to ancillary pieces of code, Mr. Wroblewski would sometimes give me the basic code context into which the algorithms that I had identified and he had confirmed fit in a more overarching way.

13. Mr. Wroblewski did not perform any analysis of the LACE source code with the goal of determining any potential infringement of any claims of U.S. Patent No. 4,829,381.



14. I myself am qualified to perform a substantial portion of the translation function, which was done by Mr. Wroblewski, on my own.

15. Throughout our work together, I was able to review and supervise the work of Mr. Wroblewski. My training and experience reading and writing source code programming enabled me to ascertain the accuracy of Mr. Wroblewski's work. Although I did not review each step of his translation, I reviewed and/or participated in a sufficient level of his work to be completely comfortable with the quality of his translation activities.

16. The type of source code translation input provided to me by Mr. Wroblewski is oftentimes relied upon by individuals in the field of digital image processing. It is not necessary that an image processing expert rely on the same source code translator each time as long as the translator is qualified to read the code language.

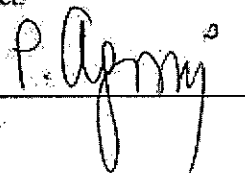
17. I myself have relied on source code specialists in the past to perform tasks similar to what Mr. Wroblewski did in this case.

18. Utilizing a source code specialist in this manner allows me, and others in this field, to efficiently utilize our time on the digital image processing analysis in question, rather than on the translation function.

I declare under penalty of perjury that the foregoing is true and correct.

June 9, 2008

Dr. Peggy Agouris

A handwritten signature in black ink, appearing to read 'P. Agouris', is written over a horizontal line.

# **Exhibit 3**


**REDACTED**

# **Exhibit 4**

**REDACTED**

# **Exhibit 5**

C. Graham  
Gerst/Chicago/Kirkland-Ellis  
03/13/2007 03:37 PM

To "Matthew C. Bernstein" <Bernstein@fr.com>  
"John Giust" <Giust@fr.com>, "William Marsden"  
cc <marsden@fr.com>, "Russell Levine"  
<rlevine@kirkland.com>  
Subject RE: Polaroid/HP 

Matt: I'm attaching the CV of a consultant, Joe Wroblewski, we would like to use to evaluate the code that you've sent, along with his signature to be bound by the protective order.

Although the protective order provides seven days to object, please let me know whether you would agree to approve of him sooner so that we can get him going on the evaluation.

Cordially,

C. Graham Gerst  
Kirkland & Ellis LLP  
200 E. Randolph Dr.  
Chicago, IL 60601  
ggerst@kirkland.com  
312 861-2023 (phone)  
312 660-0964 (fax)

<<< Attachment 'Wroblewski Secrecy Agreement.pdf' has been archived by user  
'CommonStore/IT/Kirkland-Ellis' on '06/30/2007 00:19:48'. >>>

<<< Attachment 'Wroblewski Joseph.doc' has been archived by user 'CommonStore/IT/Kirkland-Ellis'  
on '06/30/2007 00:19:49'. >>>

# Oak Enterprises

*Quality Computer Consultants*

800 Roosevelt Road, Building E, Glen Ellyn, IL 60137 (630) 858-4443 Fax (630) 858-4594

## **Joseph P. Wroblewski - Resume** **Software Engineer/Architect**

*Years Experience: 24*

### **Summary of Work Experience**

Software Engineer/Architect with a focus on agile software development methods that leverage the strengths of use case analysis, object oriented design and framework based reuse. With several years of Internet development experience, currently specializing in Web Applications and Web Services based on Java Enterprise Edition architecture and Ruby on Rails. Expert developer with C++, Java, JavaScript and Ruby technologies.

### **Education**

- PURDUE UNIVERSITY, West Lafayette, IN. Masters of Science in Electrical Engineering, 1982
- UNIVERSITY OF ILLINOIS, Urbana, IL. Bachelors of Science in Electrical Engineering, 1981
- UNIVERSITY OF ILLINOIS, Chicago, IL. Completed 48 post graduate quarter hours in Electrical Engineering and Computer Science Department, part-time from 1985 - 1992

### **Professional Experience**

#### *Consultant, Exelon -1/07 to present*

Lead software architect and developer for a new, enterprise wide web application to control software migrations to all corporate production environments. Working with stakeholders from all areas of the company to gather requirements and create detailed specifications and use cases. The innovative architecture leverages multiple open source projects resulting in a design that is both robust and free of any licensing fees. All code is written in Ruby using the Rails web development framework. Quality objectives are being addressed by using test driven development and automated deployments both of which are supported natively in Rails.

#### *Consultant, Northern Trust Bank -10/05 to 12/06*

Major refactoring of Web Cash Movement application front end using Java Server Faces (JSF) technology. Primary role is software development. Also worked closely with the quality assurance group to generate detailed Use Cases. Analysis documentation is a high priority on this project since the testing team is located offshore.

#### *Consultant, Exelon -9/04 to 10/05*

Re-engineered three mission critical applications as J2EE web service. Worked with users to fully identify all requirements and specifications to ensure redesign fully meets user's expectations. Enhancements in performance, error handling and logging were addressed to improve the maintainability of the application which runs on a WebLogic application server and interfaces with PeopleSoft General Ledger. Development environment includes: Eclipse IDE, ant build scripts, log4j, JUnit and SourceSafe.

#### *Consultant, Northern Trust Bank -7/00 to 8/04*

Front End Architect and lead developer for the Web Cash Movement application. Starting with use cases, initiated and helped create detailed user interface specifications. Working with usability experts, led the design and layout of all screens and numerous workflows that compose this complex web application. As architect, was responsible for the design and implementation of a model/view/controller architecture using Java Servlets, JSPs, JavaBeans and JavaScript. Development tools utilized include: JBuilder, HomeSite, WebLogic Application Server, Rational Rose and PVCS.



*Consultant, Trans Union –1/00 to 7/00*

Architect on a project to reengineer a legacy business application. The new system adheres to the Java 2 Enterprise Edition specification and is using Enterprise Java Beans running under IBM's WebSphere application server. The business logic runs on an OS390 server and accesses the backend DB2 database using JDBC. The project adopted the Rational Unified Process (RUP) methodology and used the complete Rational tool suite including RequisitePro and Rose 2000.

*Consultant, Motorola –6/99 to 1/00*

Member of a team that developed a Wireless Access Protocol (WAP) Server that allows users of cellular phones to access the Internet. The WAP Server is an NT box that terminates the WAP connection from cellular phones and converts them to standard HTTP and HTML Internet protocols. The server software is a multi-process, multi-threaded C++ application developed using the Visual C++ IDE and C++ Standard Library. Actively involved in the architecture and object design of the entire WAP protocol stack and the implementation and performance optimization of one of the layers.

*Consultant, Trans Union –2/98 to 6/99*

Worked with software development teams acting as a C++ and Object Technology consultant. Responsibilities included C++ and Object Technology training/mentoring as well as leading the analysis and design efforts on multiple projects that reengineered mission critical applications on the mainframe. Much of the software development was done on the PC using Visual C++ and the Standard Template Library before being ported to the mainframe for final testing. All analysis and design done using Unified Modeling Language (UML) techniques that were documented using Rational Rose.

*Consultant, AT&T –10/95 to 1/98*

Member of the AT&T WorldNet development team responsible for developing all client software for AT&T's WorldNet Internet service. Designed and implemented various communications software components which involved using Java, HTML, HTTP, and CGI Internet standards. Application designed to be multi-platform with support for Win3.x, Win95, and WinNT systems.

*Consultant, NetAccent –6/96 to 1/98*

Part of a team developing a fully functional Internet email client implemented as a 100% pure Java Application. The email client was designed as a true *Network Application* allowing universal access to the program, data, and user preferences.

*Consultant, AT&T Global Information Solutions (NCR) --3/94 to 9/95*

- 5/95 to 9/95.  
*Object Technology* consultant in a Windows 95 application that is focused on computer telephony integration. This multimedia application used object technology in every facet of development from architecture and analysis through design and coding. The Rational Rose CASE tool has been tightly integrated into the development process using the Round Trip Engineering capabilities which allows code generation from design diagrams and also allows the design diagrams to be reversed engineered from the code as it evolves. Reuse has been a major theme of the project which is using Design Patterns and Object Frameworks for design level reuse, toolkits and libraries for code reuse, and Component Object Model (COM)/OLE components for off-the-shelf component reuse.
- 3/94 - 4/95  
 Software developer on a Windows based multimedia video teleconferencing project. Developed a multipoint data communications protocol that is part of the middleware layer based on an object oriented architecture. Object oriented analysis and design done using Rational Rose CASE tool; C++ coding and testing done using Visual C++ IDE.

*Architect, CCC Information Services -- 9/93 to 2/94*

Member of architecture team responsible for reengineering a mainframe platform to a client/server, distributed object model architecture. Primarily responsible for internetworking issues that provided peer-to-peer connectivity to remote access clients across a wide area network. Development of Windows client and UNIX server communication software components done using object technology and the C++ programming language.

*Senior Member of Technical Staff, Tellabs Inc. -- 3/92 to 8/93*

- 7/92 - 8/93.  
Lead role in the software development for a real-time embedded system based on the Motorola 68302 processor. Analysis and design was accomplished using object technology. All programming was done in C++ using an integrated development environment CASE tool running on SUN workstations.
- 3/92 - 6/92  
Member of the data communications group. Responsible for the redesign of distributed software controlling a digital link (T1) interface card which is part of a digital switching platform.

*Member of Technical Staff, AT&T Bell Laboratories -- 6/81 to 3/92*

- 10/90 - 3/92  
Using C and C++ programming languages, developed software to control multimedia applications including FAX and Text-To-Speech for a UNIX based PC platform that is part of an Advanced Intelligent Network.
- 3/90 - 9/90  
Member of SESS architecture team. Responsible for the design of hardware and software maintenance architecture for a SONET telecommunications network.
- 1/89 - 2/90  
Created architecture and design of Broadband ISDN equipment that terminates SONET and ATM protocols. Software architecture based on real-time assembly language programming of RISC microprocessor. Also constructed a 150 Mbs data communications analyzer that can be controlled remotely from UNIX workstation.
- 11/87 - 12/88  
Designed a high speed CMOS prototype chip using integrated CAD tools. The design included both full and semi-custom circuits implemented with a symbolic programming language.
- 7/84 - 10/87  
Coordinated the development and testing of data communications protocol software used between ISDN terminal equipment and a central office switch. In addition to developing a C language implementation of the Level 2 protocol, also performed numerous project management functions.
- 6/82 - 6/84  
Designed, implemented and tested maintenance software for central office switch. Designed diagnostic strategies and developed diagnostic programs. Consulted with hardware designers suggesting design changes to improve testability and reliability. All software developed in the C language using the facilities of the UNIX operating system.

\*\*\*

# **Exhibit 6**

**KIRKLAND & ELLIS LLP**

AND AFFILIATED PARTNERSHIPS

200 East Randolph Drive  
Chicago, Illinois 60601

Michelle W. Jordan  
To Call Writer Directly:  
312 861-2307  
mjordan@kirkland.com

312 861-2000

www.kirkland.com

Facsimile:  
312 861-2200  
Dir. Fax: 312 861-2200

March 15, 2007

**VIA EMAIL AND FACSIMILE**

Matthew C. Bernstein, Esq.  
Fish & Richardson, P.C.  
12390 El Camino Real  
San Diego, CA 92130

Re: *Polaroid Corporation v. Hewlett Packard Company*  
USDC-D. Del.-C.A. No. 06-738 (SLR)

Dear Mr. Bernstein:

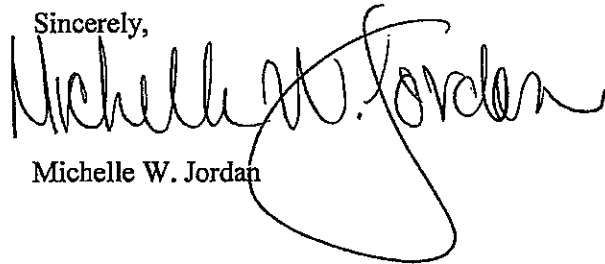
On behalf of Graham Gerst, I am responding to your letter dated March 15, 2007 where you are seeking additional information about Polaroid's potential expert, Joseph Wroblewski. I will respond to your questions in the order in which you presented them in your letter:

- (1) Mr. Wroblewski does not have a present or former relationship with either of the parties to this litigation.
- (2) Mr. Wroblewski has not had any business relationships in the past four years in an area involving software algorithms for image processing, printers, or cameras.
- (3) Mr. Wroblewski is the founder and president of Stretch Computing. Stretch Computing contracts with Oak Enterprises as an independent consultant. Polaroid is contracting with Oak Enterprises to retain Mr. Wroblewski.

We appreciate your willingness to expedite HP's decision on Mr. Wroblewski. I confirm that Polaroid will also expedite its decision regarding the first expert that HP discloses.

If you have any further questions, feel free to contact me at the number above.

Sincerely,

A handwritten signature in black ink, appearing to read "Michelle W. Jordan", with a large, stylized loop at the end.

Michelle W. Jordan

MWJ/amh

# **Exhibit 7**

## FISH & RICHARDSON P.C.

Frederick P. Fish  
1855-1930

W.K. Richardson  
1859-1951

12390 El Camino Real  
San Diego, California  
92130

Telephone  
858 678-5070

Facsimile  
858 678-5099

Web Site  
www.fr.com

### VIA EMAIL AND FACSIMILE

March 16, 2007

Graham Gerst  
Kirkland & Ellis  
200 East Randolph Drive  
Chicago, IL 60601

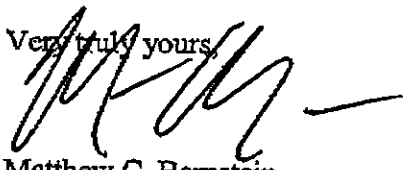
Re: Polaroid Corporation vs. Hewlett-Packard Company  
USDC-D. Del. - C.A. No. 06-738 (SLR)

Dear Mr. Gerst:

HP currently has no objection to Polaroid's disclosure of materials to Mr. Wroblewski under the terms of the protective order and his executed secrecy agreement in the above-referenced case.

If you have any questions, please feel free to contact me at 858-678-4303.

Very truly yours,

  
Matthew C. Bernstein

MCB:jmo  
10718330.doc



ATLANTA

AUSTIN

BOSTON

DALLAS

DELAWARE

NEW YORK

SAN DIEGO

SILICON VALLEY

TWIN CITIES

WASHINGTON, DC

## FISH & RICHARDSON P.C.

12390 El Camino Real  
San Diego, California  
92130

Telephone  
858 678-5070

Facsimile  
858 678-5099

Web Site  
www.fr.com

Date March 16, 2007

To Graham C. Gerst  
Kirkland & Ellis  
200 East Randolph Drive  
Chicago, IL 60601  
Telephone: 312-861-2000

Facsimile number 18296-01353531 / (312) 861-2200

From Matthew C. Bernstein

Re Hewlett-Packard/Polaroid

Number of pages  
including this page 2

Message Letter attached

NOTE: This facsimile is intended for the addressee only and may contain privileged or confidential information. If you have received this facsimile in error, please immediately call us collect at 858 678-5070 to arrange for its return. Thank you.